Application SN 09/678,915
Amendment dated June 11, 2007
Reply to Office Action dated 03/21/2007

Amendment to the claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Withdrawn):   A vending machine service system for transmitting vending data to a vending machine to a service operator, comprising:

monitoring means for monitoring said vending machine, said monitoring means for compiling data on the operation of said machine, providing compiled data comprising machine identification and sales data on the vending machine, said monitoring means further for formatting said compiled data into a data stream;

a transmitter for transmitting said data stream to a reception area, providing a transmission;

a service vehicle situated in said reception area, said service vehicle for conveying an inventory of product for the vending machine, said service vehicle further comprising:

receiver means for receiving said transmission, said receiver further comprising interface means for converting said transmission back to said data stream; and

a portable computer for receiving said data stream, said portable computer further comprising display means for displaying the identification of the vending machine and sales data for the vending machine, so as to enable said service operator to obtain inventory from said service van and convey same to the vending machine, so as to stock said vending machine without a physical inventory of the vending machine.

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2. (Withdrawn): The vending machine service system of Claim 1, wherein said compiled data of monitoring means includes data on cash receipts and change requirements for the vending machine, and wherein said display means of said portable computer display displays said data on cash receipts and change requirements.

3. (Withdrawn): The vending machine service system of Claim 2, wherein said compiled data of said monitoring means includes service information on the operational status of the vending machine, and wherein said display means of said portable computer display displays said data on service information for the vending machine.

4. (Withdrawn): The vending machine service system of Claim 3, wherein there is provided second monitoring means for monitoring a second vending machine located a distance from said first vending machine, said second monitoring means for compiling data on the operation of the second vending machine, providing compiled data comprising machine identification and sales data on the second vending machine, said second monitoring means further for formatting said compiled data into a second data stream;

a second transmitter for transmitting said data stream to said reception area, providing a second transmission;

wherein said receiver means further receives said second transmission, said interface means further converts said second transmission to a second data stream; and

said portable computer is provided for receiving said second data stream, said portable computer further comprising display means for displaying the identification of the second vending machine and sales data for the second vending machine, so as to enable said service operator to obtain inventory from said service van and convey same to the second vending machine, so as to

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stock said second vending machine without a physical inventory of the second vending machine.

5. (Withdrawn): The vending machine service system of Claim 4, wherein there is provided a third monitoring means for monitoring a third vending machine located a distance from said first and second vending machines, said third monitoring means for compiling data on the operation of the third vending machine, providing compiled data comprising machine identification and sales data on the third vending machine, said third monitoring means further for formatting said compiled data into a third data stream;

a third transmitter for transmitting said data stream to said reception area, providing a third transmission;

wherein said receiver means further receives said third transmission, said interface means further converts said third transmission to a third data stream; and

said portable computer is further provided for receiving said third data stream, said portable computer further comprising display means for displaying the identification of the third vending machine and sales data for the third vending machine, so as to enable said service operator to obtain inventory from said service van and convey same to the third vending machine, so as to stock said second vending machine without a physical inventory of the second vending machine.

6. (Withdrawn): A vending machine service system for transmitting vending data from a vending machine to a service operator, comprising:

monitoring means for monitoring a plurality of vending machines situated at disparate locations relative one another within a local area, said monitoring means comprising individual monitor modules for compiling data on the operation of said plurality of machines, providing compiled data comprising machine identification and sales data on each of said vending machines,

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said monitoring means further formatting said compiled data into a data stream;

a transmitter for transmitting said data stream to a reception area, providing a transmission;

a service vehicle situated in said reception area, said service vehicle for conveying an inventory of product for each of said vending machines, said service vehicle further comprising:

receiver means for receiving said transmission, said receiver further comprising interface means for converting said transmission back to said data stream; and

a portable computer for receiving said data stream, said portable computer further comprising display means for displaying the identification of each of said vending machine and sales data for each of said vending machines, so as to enable said service operator to obtain inventory from said service van and convey same to each of said vending machines, so as to stock said vending machine without a physical inventory of each of said vending machines.

7. (Withdrawn): The vending machine service system of Claim 6, wherein said compiled data of monitoring means includes data on cash receipts and change requirements for each of said vending machines, and wherein said display means of said portable computer display displays said data on cash receipts and change requirements.

8. (Withdrawn): The vending machine service system of Claim 7, wherein said compiled data of said monitoring means includes service information on the operational status of each of said vending machines, and wherein said display means of said portable computer display displays said data on service information for each of said vending machines.

9. (Withdrawn): The vending machine service system of Claim 8, wherein said portable computer further comprises uploading means to upload said data stream to an administrative office and downloading means to download said data stream to said portable computer.

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10. (Withdrawn): The vending machine service system of Claim 9, wherein said monitoring means appends to said data stream location information on the location of each of said vending machines, and wherein said display means of said portable computer display displays said location information for each of said vending machines.

11. (Withdrawn): The vending machine service system of Claim 10, wherein there is further provided route indication means associated with said portable computer to utilize said location information to display a preferred route for the service of each of said vending machines.

12. (Currently amended): The method of servicing a plurality of vending machines situated at disparate locations relative to one another within a location area, comprising the steps of:

a) compiling vending machine data to update sales and cash flow information, providing operational status and machine ID information on each said vending machine, so as to provide a separate, updated data stream for each machine;

b) repeatedly transmitting each said updated data stream utilizing monodirectional RF transmission only, via a separate-transmitter associated with each vending machine;

c) adjusting the transmission characteristics of each said transmitters associated with each machine, providing multiple overlapping transmissions from separate transmitters to a designated reception area;

d) repeating steps a-b so as to provide continuously updated data streams for each machine, such that said data streams are continuously conveyed to said designated reception area in approximate real time, while

e) positioning a service vehicle within said reception area;

f) receiving said multiple overlapping transmissions from each of said separate

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transmitters at said service vehicle within said reception area, providing received data streams;

g) uploading said received data streams to a portable computer;

h) utilizing said portable computer to compile said data streams, and display inventory data, so as to pull inventory from said service vehicle;

i) conveying said portable computer with said pulled inventory away from said service vehicle, while utilizing said portable computer to indicate the location and route of the vending machines;

j) h) stocking each said vending machine as needed utilizing said pulled inventory in the order indicated by said portable computer;

f) k) discerning vending machine activity relating to coin box or product inventory changes from the period of reception of said received data at the service vehicle, to the point where each vending unit is opened for replenishing inventory and indicating same on said portable computer in order to compensate for any activity from the period of reception at the service vehicle to the point when the unit is serviced, providing adjusted received data; and then

j) l) resetting each vending machine at said machine location, so as to include the inventory stocked in each machine in step "j" "h.".

13. (Currently amended): The method of Claim 12, wherein after "j.", there is further provided the additional steps of:

k. adjusting said received data to accommodate said vending machine activity in step "f", so as to balance out each vending machine, providing adjusted received data; and

l m. providing communicating, via said portable computer, said adjusted received data to a

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base office.

14. (Currently amended): The method of servicing a plurality of vending machines situated at disparate locations relative to one another within a location area, comprising the steps of:

a) polling each said machine, compiling identification, and updated product sales and cash flow data for each machine, providing an updated data stream;

b) repeatedly transmitting said updated data stream utilizing monodirectional RF transmission only, via a transmitter located in the vicinity of each said machine, at predetermined intervals, providing transmissions within a reception area;

c) repeating steps a-b so as to provide continuously updated data streams for each machine, such that said updated data streams are conveyed to said designated reception area in approximate real time, while

d) providing a service vehicle having product inventory for said vending machines;

e) positioning said service vehicle within said reception area;

f) receiving said transmissions from said transmitter, providing a received data stream;

g) said received data stream providing to service personnel sales and cash flow data for each vending machine conveyed in said received data stream, providing a picking ticket at said service vehicle;

h) pulling inventory from said service vehicle based upon said picking ticket, providing pulled inventory;

i) stocking each said vending machine as needed utilizing said pulled inventory.

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j) discerning vending machine activity relating to coin box or product inventory changes from the period of reception of said received data at the service vehicle, to the point where each vending unit is opened for replenishing inventory; and

k) resetting each vending machine at said machine location, so as to include the inventory stocked in each machine in step "I.".

15. (Currently Amended): The method of Claim 14, wherein after step "k.", there is further provided the additional steps of:

l. adjusting said received data to accommodate said vending machine activity in step "I", so as to balance out each vending machine, providing adjusted received data; and

m. providing said adjusted received data to a base office.

16. (Previously amended): The method of Claim 15, wherein after step "g." there is provided the additional step of providing location information on each said vending machine, and discerning an optimal route order for the servicing of each said vending machine, and providing sales and cash flow data for each said vending machine in said optimal route order.

17. (Currently amended): The method of servicing a vending machine, comprising the steps of:

a) polling said machine, compiling sales and cash flow data, providing a data stream;

b) repeatedly transmitting said data stream, utilizing monodirectional RF transmission only, providing a transmission within a reception area;

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c) repeating steps a-b so as to provide continuously updated data streams for each machine, such that said data streams are conveyed to said designated reception area in approximate real time, while

d) providing a service vehicle having product inventory for said vending machine;

e) positioning said service vehicle within said reception area;

f) receiving said transmission in said reception area, providing a received data;

g) providing sales and cash flow data for the vending machine, providing a picking ticket;

h) pulling inventory from said service vehicle based upon said picking ticket, providing pulled inventory;

i) stocking said vending machine utilizing said pulled inventory;

j) discerning vending machine activity relating to coin box or product inventory changes from the period of reception of said received data at the service vehicle, to the point where each vending unit is opened for replenishing inventory; and

k) resetting each vending machine at said machine location, so as to include the inventory stocked in each machine in step "I.".

18. (Currently amended): The method of Claim 17, wherein after "k.", there is further provided the additional steps of:

l. adjusting said received data to accommodate said vending machine activity in step "I", so as to balance out each vending machine, providing adjusted received data; and

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m. providing said adjusted received data to a base office.

19. (Currently amended): The method of servicing a vending machine, comprising

the steps of:

a) receiving a data stream from the vending machine via a monitoring assembly;

b) removing data from said data stream unrelated to inventory, cash, operational

status, or machine ID utilizing programming in said monitoring assembly, providing an abbreviated

data stream;

c) preparing a transmission string including an identification of the machine,

inventory, cash data, and/or operational status of said machine from said abbreviated data stream,

and forwarding said transmission string to a transmitter module;

d) transmitting, utilizing one-way RF transmission only, said transmission string, to

broadcast within limited transmission range and within a limited, local area, and repeating said

transmission to maintain a flow of data to a reception area; while

e) updating said transmission string as new data is received;

f) repeating steps a-e for other vending machines in the vicinity, so as to provide

multiple transmissions to the reception area, such that said transmission conveys a data stream to

said designated reception area which is updated in approximate real time;

g) positioning a service vehicle within the reception area of said transmissions;

h) receiving said transmissions at said service vehicle;

l) inputting said transmissions into a portable computer;

j) conveying said transmissions via said portable computer to a route operator

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operating the service vehicle providing received data;

k) allowing said route operator to pull inventory and money change from said service vehicle for servicing each of said vending machines so as to provide stock for filling said vending inventories;

l) stocking each said vending machine utilizing said pulled inventory and money change from said service vehicle

m) discerning vending machine activity relating to coin box or product inventory changes from the period of reception of said received data at the service vehicle, to the point where each vending unit is opened for replenishing inventory; and

n) resetting each vending machine at said machine location, so as to include the inventory stocked in each machine in step "i.".

20. (Currently amended): The method of Claim 19, wherein there is further provided the additional step "O." of adjusting said received data to accommodate said vending machine activity in step "m", so as to balance out each vending machine, providing adjusted received data; and

p. downloading said adjusted received data from the portable computer to a base office.

21. (Currently amended): The method of Claim 20, wherein there is further provided the additional step "q." of allowing the service personnel to convey said machine inventory to said next machine;

r) repeating steps "l" through "p" until each of said vending machines is stocked;

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s) returning to the service vehicle with the portable computer;

t) downloading said adjusted received data from the portable computer to a base

office.

22. (Currently amended): The method of servicing a vending machine, comprising

the steps of:

a) receiving data from a vending machine, providing received data;

b) compiling said data to discern activity, providing filtered received data;

c) preparing said filtered received data, providing a transmission string;

d) communicating said transmission string to a reception area **consisting of** the step

of transmitting, utilizing mono-directional RF transmission said transmission string to a reception

area in the vicinity of said vending machine;

e) repeating steps a-d so as to provide a continuous transmission of data for said

vending machine to said designated reception area which is updated in approximate real time, while

f) positioning a service vehicle within said reception area;

g) receiving said transmission, providing received data;

h) utilizing said received data from said transmission to pull inventory and money

change from said service vehicle for servicing said vending machine, providing pulled inventory;

I) conveying said pulled inventory to said vending machine;

j) stocking said vending machine;

k) discerning vending machine activity relating to coin box or product inventory

changes from the period of reception of said received data at the service vehicle, to the point where

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each vending unit is opened for replenishing inventory;

l) adjusting said received data to accommodate said vending machine activity in step

"k", so as to balance out each vending, providing adjusted received data

m) resetting said vending machine, resetting said filtered received data.

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